

**REMARKS**

Claims 1-26 remain in the application. Claims 1-26 stand rejected. The independent claims are 1, 4, 7, 13-14, 18-21, and 23-26

**Comments on the Abstract.**

The Examiner has reminded the Applicant that the Abstract should “detail . . . the gist of the invention and the problem which the invention solves . . .” Applicant respectfully submits that the Abstract does detail the gist of the invention, which includes adding terms to documents from search queries submitted to a search engine. This combined with the title should make clear to a person of ordinary skill the problem being solved. However, to make the problem solved more explicit, Applicant herein amends the Abstract by adding a new sentence in line 10 specifying that “search engine results will adapt to changes in usage of search terms.” Applicant further amends the Abstract to reflect the different scopes of several aspects of the invention. Applicant requests the Examiner to consider the Abstract in condition for allowance.

**Rejections under 35 U.S.C. §102**

The Examiner rejected claims 1-26 under 35 U.S.C. §102(e) as being anticipated by Brunner et al., U.S. Patent # 5,550,971 (Brunner).

Brunner is directed to a user interface for a “database” with “data types” and “functional types” relating data types. Brunner provides “a semantic model” for the database that can be varied by user intervention to modify the data types and functional types in the database. The user interface is modified based on the new semantic model. The semantic model is presented as “a graph”. “The user selects a node on the graph . . .

to generate a form containing a plurality of blanks.” Using the interface a “user enters a query constraint into one or more of the blanks and the database is searched for instances of data meeting the query constraints.” (Brunner, Abstract.)

Applicant’s invention is directed to retrieving stored information by processing search queries and selectively adding terms of the search queries to the information stored. For example, “a search engine process . . . permit[s] full text search queries against the documents and files managed by the file management system” (specification, page 10, lines 3-6), “a typical search query [has] . . . a number of terms . . . linked by Boolean operators” (specification, page 11, lines 6-7), and “remaining query terms are then added to the [documents and files, e.g.,] webpages” (specification, page 14, lines 5-6).

In claim 1, “information retrieval” apparatus includes a processor “to receive search queries” and “process those queries against information stored” and “provide a list of terms used in search queries . . . to be selectively added to information stored . . .”

Applicants respectively submit that the Examiner does not show where Brunner teach or suggest “selectively” adding “terms used in search queries” to “information stored.”

The Examiner asserts that “processing of query requests is shown by internal query language processor (element 22 [of Brunner Fig. 1]) together with the semantic model (element 24 [of Brunner Fig. 1])” (page 3). The Examiner appears to equate the processor of Applicant’s invention with the internal query language processor and semantic model of Brunner. Therefore, the Examiner appears to equate “query requests”

with the “search queries” of Applicant’s invention and with the “query constraints” of Brunner.

Brunner discloses that “[t]he internal query processor 22 translates a series of . . . query constraints . . . into a new set of commands that efficiently query a semantic intermediate data model 24 . . . [that] describes . . . the data in the database” (Brunner, column 4, lines 39-45). Brunner further discloses that a “local cache . . . is used to store the search results . . . received from the . . . database 12” (Brunner, column 4, lines 55-57). Since the search results come from the database, the Examiner must associate the database of Brunner with the “information stored” of Applicant’s invention.

The Examiner has not shown where Brunner teaches or suggests storing any portion of the query constraints in the database, thus the Examiner has not shown where Brunner teaches or suggests that “terms used in search queries . . . be selectively added to information stored” as required by Applicant’s claim 1. For example, the database of Brunner may consist of records with the field “client name” and may contain 100 such records, 50 records including “Company A” and 50 records including “Company B” in the client name field. If a user searches for records in which “client name” is “Company Z,” then “Company Z” is a query constraint. Brunner implies that no results are returned, but does not suggest adding “Company Z” to the database. On the other hand, Applicant’s invention would call for selectively adding Company Z to the database somewhere (not necessarily in the “client name” field).

Furthermore, Brunner does not suggest that the semantic model can be applied to documents and files, such as webpages, that are not databases. Such documents and files

are explicitly included in Applicant's "information stored" according to the specification quoted above.

Therefore Brunner does not teach or suggest "terms used in search queries . . . be selectively added to information stored" and thus does not teach or suggest every significant limitation of Applicant's invention. Applicant respectfully submits that claim 1 is not anticipated by Brunner, and therefore the 102 rejection is improper. Since claims 2-3 depend directly or indirectly from claim 1, they are not anticipated by Brunner for at least the same reason. Applicant respectfully requests the Examiner reconsider the rejection of claims 1-3.

Similarly, the system of independent claim 4 recites "terms used in search queries . . . be selectively added to information stored." Thus claim 4, and claims 5 and 6 dependent directly or indirectly from claim 4, are not anticipated by Brunner for at least the reasons given above for claim 1. Applicant respectfully requests the Examiner reconsider the rejection of claims 4-6.

Similarly, the method of independent claim 7 recites "terms used in those queries . . . for selective addition to documents or files stored." Thus claim 7, and claims 8-12 dependent directly or indirectly from claim 7, are not anticipated by Brunner for at least the reasons given above for claim 1. Applicant respectfully requests the Examiner reconsider the rejection of claims 7-12.

Similarly, the method of independent claim 21 and the computer program product of independent claim 26 each recites "terms used in search queries . . . selectively adding . . . to said document or file. . ." Thus claims 21 and 26, and claim 22 dependent from claim 21, are not anticipated by Brunner for at least the reasons given above for claim 1.

Applicant respectfully requests the Examiner reconsider the rejection of claims 21-22 and 26.

Likewise, the computer program product of independent claim 23 recites “terms used in queries . . . for adding . . . to at least one document,” and is not anticipated by Brunner for at least the reasons given above for claim 1. Applicant respectfully requests the Examiner reconsider the rejection of claim 23.

The method of independent claim 13 recites “storing . . . terms used in queries together with frequency of occurrence.” The Examiner asserts that Brunner “shows frequency of occurrence of an object type . . . by the storage of ‘instances’ of DOT types defined in the model layer” (page 4). Applicant respectfully submits that the object types defined in the model layer are elements of the database, and that frequency of occurrence of object types in the database is independent of and does not provide evidence for frequency of occurrence of the queries or of values of constraints in the queries. For example, the database may have 100 instances of client name in a database, but only 5 queries for retrieval by client name consisting of 4 queries for Company A and 1 query for company B. Then the frequency of occurrence of instances of client name is 100, but the frequency of occurrence for queries on Company A is 4. Thus Brunner does not teach or suggest a frequency of occurrence of terms in queries. Since claim 13 is not anticipated by Brunner. Applicant respectfully requests the Examiner withdraw the rejection of claim 13.

The method of independent claim 14 and the computer program product of claim 24 each recites “generating a . . . database of terms used in queries” (claim 14 lines 3-4). Brunner does not teach or suggest generating a database of query constraints, therefore

Applicant respectfully submits that the 102 rejection is improper for claims 14 and 24. Furthermore, Brunner does not teach or suggest “generating a new term list of terms used in queries” or “using . . . said new term list . . . for adding to documents containing those terms” as are also required by each of claims 14 and 24. Since Brunner does not teach or suggest all the significant elements of Applicant’ claims 14 and 24, those claims are not anticipated by Brunner. For at least the same reasons, claims 15-17, which depend directly or indirectly from claim 14, are not anticipated by Brunner, either. Applicant respectfully requests the Examiner reconsider the rejection of claims 14-17 and 24.

The method of independent claim 18 recites “sorting query terms . . . by frequency of occurrence” (claim 18, lines 3-5). Brunner does not teach or suggest sorting query constraints, by frequency of occurrence or by any attribute, therefore Applicant respectfully submits that the 102 rejection is improper for claim 18. Applicant requests the Examiner reconsider this rejection.

The method of independent claim 19 recites “presenting” “terms used in search queries” “in indexing a document.” The Examiner does not show where Brunner suggests using search constraints to index the database. Indeed, Brunner teaches just the opposite, that the data model of the database is used to construct the search queries. For example, the Brunner “invention interrogates the model to determine how the user interface should be generated” (Brunner, column 15, lines 30-31). “To search the . . . database, a user types query constraints in the areas [of the user interface] to locate specific instances” (Brunner, column 15, lines 59-61). Therefore Applicant respectfully submits that the 102 rejection is improper for claim 19 and requests that the Examiner reconsider the rejection.

The method of independent claim 20 recites “determining if [a] document contains subject matter related to [a] term” (claim 20, lines 5-6) when a document contains a term. The Examiner does not show where Brunner suggests determining if the database contains subject matter related to a term if the term is in the database. Clearly, the database retrieval of Brunner will return a result if the database contains the term in the field searched, but the Examiner has not shown where Brunner discloses that a separate assessment of subject matter relatedness is made. Furthermore, if relatedness were determined, the Examiner still does not show where Brunner even suggests “adding said term to said document” as is also recited by claim 20. Therefore Applicant respectfully submits that the 102 rejection is improper for claim 20 and requests that the Examiner reconsider the rejection.

The computer program product of independent claim 25 recites “presenting” “terms used in search queries” “over a period of time.” The Examiner does not show where Brunner suggests presenting search constraints from “queries” accumulated over a period of time. Brunner teaches only presenting the search constraints input by the user in the user interface for a single, current query of the database. For example, “[t]he query processor then creates a database query . . . to retrieve . . . entries in the database” (column 15, lines 63-66, emphasis provided). Therefore, because all significant elements of claim 25 are not disclosed or suggested by the reference, Applicant respectfully submits that the 102 rejection is improper for claim 25 and requests that the Examiner reconsider the rejection.

For the reasons given, Applicant believes that the application is in condition for allowance and the Applicant requests that the Examiner give the application favorable consideration and permit it to issue as a patent.

Should any additional issues remain, or if I can be of any assistance, please do not hesitate to contact me at (202) 756-8682.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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